

LOW MOLECULAR WEIGHT POLYMANNURONATE

Abstract of the Disclosure

Disclosed is a polymannuronate composition including polymannuronate having molecular weight from about 4,000 to about 500,000 in a high purity. The composition can be used in producing nutritional compositions such as functional foods and health aids. Also, the composition can be used in a pharmaceutical composition along with a pharmaceutical carrier. The composition has various effects, including controlling serum lipids, preventing hyperlipidemia, preventing obesity, preventing diabetes, enhancing functions of liver, expelling heavy metals from a body, etc. Further disclosed is a process to producing the polymannuronate composition, in which alginate is hydrolyzed and then the polymannuronate components are isolated. Further disclosed herein is a composition produced by that process. In the hydrolysis, an organic acid is preferably used, and the isolation of the polymannuronate involves adjustment of pH of the resulting mixture of the hydrolysis.

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